Product Information

LED PARATHOM® PAR16 35 36°

Product Overview

Product	Wattage	CCT in K	lm	Beam Angle	Base
LED PARATHOM® PAR16 35 36°	5	2700	250	36°	GU10
LED PARATHOM® PAR16 35 36°	5	3000	260	36°	GU10
LED PARATHOM® PAR16 35 36°	5	4000	265	36°	GU10

Benefits

- 1 to 1 replacement to HAL PAR16
- Same light output as a 35W HAL, but -85% energy
- Long lifetime
- Dimmable

Key Features

- LED PAR16 lamp as replacement for Halogen PAR16 35W
- voltage: 220 – 240V
- GU10 base
- beam angle 36°
- available in light color warm white 2700°K & 3000°K, as well as cool white 4000°K
- reduces energy consumption ~ 85%
- dimmable, working on most common dimmers down to 10%
- light-to-the-back effect
- shock-proof and vibration-proof
- 25,000 hours lifetime
- UV and NIR radiation free
- mercury free
- 4 years Osram Guarantee[1]

[1] See www.osram.com/guarantee

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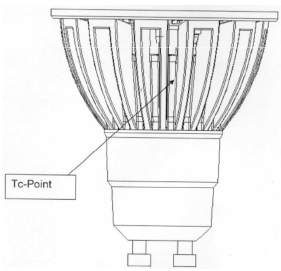
Ordering Guide

Product	Wattage	CCT	lm	Candela	Diameter	Lenght	Weight	Beam Angle	EAN10	EAN40 (ship.unit)	Ship. unit
LED PARATHOM® PAR16 35 36°	5	2700	250	600	50 mm	58 mm	68 g	36°	4008321881960	4008321881977	10
LED PARATHOM® PAR16 35 36°	5	3000	260	600	50 mm	58 mm	68 g	36°	4008321882035	4008321882042	10
LED PARATHOM® PAR16 35 36°	5	4000	265	700	50 mm	58 mm	68 g	36°	4008321882066	4008321882073	10

Common Characteristics[3]

Type	Average lifetime[4]	Switching cycles (30s on, 30s off)	Casing material	Starting time	Warm up time for 60% light	Power factor
LED PARATHOM® PAR16 35 36°	25,000 hrs	100,000	Metal/plastic	<0.5s	none	0.75
	Nominal current	**Max. inrush current**	**Tc temperature max.[5]**	**CRI**	**Mercury max.**	
LED PARATHOM® PAR16 35 36°	27mA		75°C	80	0.0 mg	



Disposal information

- Lamps with WEEE sign can be returned at specific collection points.
- LED lamps have to be disposed as special waste.

[3] Typical values. All the technical parameters apply to the entire lamp. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values.

[4] The average lifetime of LED lamps is defined as the number of hours when the light output of 50% of a large group of identical lamps goes below 70% of its initial luminous flux (L70B50, IEC60969).The lifetime is estimated at room temperature (25°C), free air burning, base up burning position and at rated voltage. To achieve a full lifetime a good heat exchange for the electronic components is required.

[5] The Tc is defined as the highest permissible temperature which may occur on the outer surface of the LED lamp (in the indicated position) under normal operating conditions and at the rated voltage/current/power or the maximum of the rated voltage/current/power range (DIN EN 62031: 2009-01)

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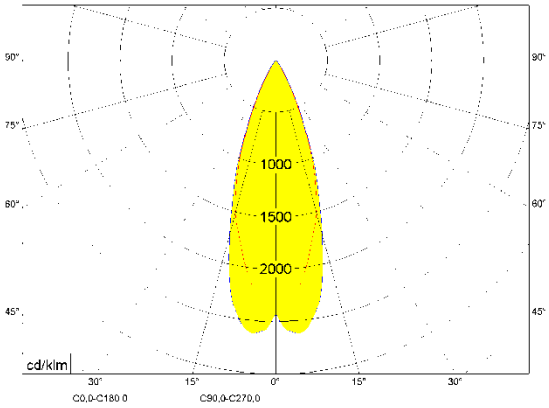
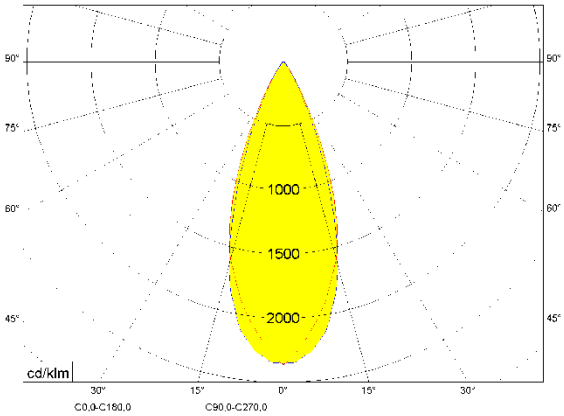
Light distribution

2700/3000K, 36° beam angle



4000K, 36° beam angle



Application information

- hotels
- restaurant
- commercial areas
- residentials
- art galleries and museum
- office space

Application Notes

1. suitable for indoor application.
2. for outdoor applications and operation in damp locations special approved fixture are required.
3. Input voltage: AC: 220-240V
4. Operating and storage temperature range between -20°C and 40°C

Lamp conformity

- 2004/108/EC Electromagnetic compatibility (EMC)
- 244/2009 Ecodesign requirements for non-directional household lamps
- IEC/ PAS 62612 Self ballasted LED-lamps for general lighting services – Performance requirements
- 2009/125/EC Ecodesign requirements for energy related products
- 2011/65/EC Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)
- 1907/2006 Registration, Evaluation, Authorization and Restriction of Chemicals (REACH Regulation)
- 2002/96/EC Waste Electrical and Electronic Equipment Directive (WEEE)
- EN 62471 Photobiological safety of lamps and lamp systems
- IEC/TR 62471-2 Photobiological safety of lamps and lamp systems - Part 2: Guidance on manufacturing requirements relating to non-laser optical radiation safety
- EN 55015 Limits and methods of measurement of radio disturbance
- EN 61000-3-2 Electromagnetic compatibility – Limits for harmonic current emission
- EN 61000-3-3 Electromagnetic compatibility – Limitation of voltage changes, voltage fluctuations, flicker in public low voltage supply systems
- EN61547 Electromagnetic compatibility immunity requirements
- 1194/2012 Eco design requirement for directional lamps, light emitting diode lamps and related equipment (DIM II)
- IEC 62560 self-ballasted LED-lamps for general lighting services by voltage >50V – Safety specifications
- 874/2012/EU Energy labeling of electrical lamps and luminaires

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Compatibility performance with dimmer [6]

Legend

L / leading edge **T** / trailing edge

Supplier	Model	Type	Dim range 1 lamp		Dim range 2 lamps		Dim range 4 lamps		Dim range 6 lamps		Dim range 10 lamps		Comment
			Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	
Siemens	5TC8 284	T	2%	100%	1%	82%	0%	76%	0%	76%	0%	72%	
Berker	286110	T							7%	99%	7%	65%	
Merfen	5771	T	8%	91%	7%	91%	6%	82%	6%	86%	6%	82%	
Gira	0307 00/I01	T	4%	99%	4%	99%	4%	99%	4%	99%	3%	99%	Audible noise with >2 lamps
Busch	6513U-102	T	6%	99%	5%	99%	4%	99%	4%	99%	4%	99%	Audible noise with 10 lamps
Peha	433 HAB	T	5%	82%	5%	87%	5%	82%	5%	82%	4%	82%	
REV	13623	L	7%	99%	11%	100%	15%	99%	19%	73%	32%	99%	Audible noise with 6 lamps
ELSO	174120	L	12%	94%	15%	100%	17%	100%	24%	99%	32%	99%	
BUSCH	2250U	L	5%	99%	6%	100%	8%	100%	9%	99%	10%	100%	Audible noise with >2 lamps
GIRA	030000	L	0%	99%	0%	100%	0%	99%	0%	99%	0%	100%	
DUWI	14188	L	30%	100%	35%	100%	42%	99%	45%	100%	42%	100%	
BUSCH	2247U	L	2%	100%	2%	100%	3%	98%	4%	99%	3%	67%	
JUNG	225 NV DE	L	4%	100%	4%	100%	6%	98%	8%	99%	6%	66%	Audible noise with 6 lamps
Duwi	14386	L	14%	100%	22%	100%	33%	98%	42%	99%	31%	66%	Audible noise with 10 lamps
KOPP	80,33	L	14%	99%	18%	100%	25%	98%	34%	99%	30%	66%	Audible noise with 6 lamps
Siemens	5TC8 256	L	20%	100%	22%	100%	32%	100%	40%	100%	31%	66%	Audible noise with <6 lamps
Lichtregler	T38S	L	11%	100%	12%	100%	15%	100%	19%	100%	21%	66%	No audible noise only with 4 lamps
JUNG	244020300	L	0%	98%	0%	98%	0%	100%	0%	99%	0%	67%	Audible noise with 1 lamp
Duwi	14485	T	8%	99%	7%	99%	6%	99%	6%	99%	6%	99%	
JUNG	254 UD IE 1	T			9%	99%	8%	99%	9%	99%	7%	99%	
BUSCH	6591 U-101	T	5%	99%	5%	99%	4%	99%	4%	99%	4%	99%	
KOPP	80,78	T	4%	99%	3%	99%	2%	99%	3%	99%	2%	99%	
BUSCH	6519U	T	5%	99%	4%	99%	4%	99%	4%	99%	4%	99%	
Schneider	ATD315	T	16%	99%	15%	99%	15%	99%	14%	99%	14%	99%	
Lichtregler	T46S	T	8%	99%	7%	99%	8%	99%	7%	99%	7%	99%	
GIRA	030700/I02	T	4%	99%	4%	99%	4%	99%	4%	99%	4%	99%	Audible noise with 6 lamps
Merten	SBD315RC	T	7%	99%	6%	99%	6%	99%	6%	99%	5%	99%	
VADSBO	TD 350	T	8%	79%	6%	72%	5%	69%	5%	69%	4%	62%	Audible noise with 10 lamps

6 Typical valuesThe test results reflect the measurement of the individual devices that were used in tests. OSRAM does not take over any responsibility, warranty or liability that this results can also be achieved by using the devices under other conditions or when using successor models of the tested devices or different models of the same manufacturer.

The test results were achieved by using the above mentioned LED-lamp types. OSRAM does not take over any responsibility, warranty or liability that this results can also be achieved by using the devices under other conditions or when using other LED-lamp types.